



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/900,312	07/06/2001	Harald Hess	VOI0131.CON	5684

7590
Todd T. Taylor
Taylor & Aust, P.C.
142 S. Main St.
P.O. Box 560
Avilla, IN 46710

12/23/2003

EXAMINER

FULLER, ERIC B

ART UNIT	PAPER NUMBER
----------	--------------

1762

DATE MAILED: 12/23/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/900,312

Applicant(s)

HESS, HARALD

Examiner

Eric B Fuller

Art Unit

1762

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 22 September 2003.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-4, 8, 10 and 11 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-4, 8, 10 and 11 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. §§ 119 and 120

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☒ Certified copies of the priority documents have been received in Application No. 09/301,194.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 13) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application) since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.
a) ☐ The translation of the foreign language provisional application has been received.
- 14) ☒ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121 since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.

Attachment(s)

- ☐ Notice of References Cited (PTO-892)
- ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____
- ☐ Interview Summary (PTO-413) Paper No(s). _____
- ☐ Notice of Informal Patent Application (PTO-152)
- ☐ Other: _____

DETAILED ACTION

Claim Rejections - 35 USC § 112

The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

Claims 2-4, 8, 10, and 11 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the enablement requirement and failing to comply with the written description requirement. The claims contain subject matter that was not described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention. Additionally, the claims contain subject matter that was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor, at the time the application was filed, had possession of the claimed invention. Specifically, claim 1 has been amended to read that the vapor supply line, for directing a moistening atmosphere, is not connected to the spray device. Claim 2 reads that the moistening medium is a vapor that, prior to spraying, is used as a carrier liquid for the coating medium. The applicant has not taught in the specification an embodiment where the vapor supply line, for delivering a moistening atmosphere, is not connected to the spray device and the moistening medium (that is utilized as the moistening atmosphere according to claim 4) acts as a carrier liquid for the coating medium. The specification is not enabling for using the moistening medium as a carrier liquid when the supply line

is not connected to the spray device. Additionally, it is not conveyed that the inventor had possession of using the moistening medium as a carrier liquid when the supply line is not connected to the spray device.

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 1-4, 8, 10, and 11 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter that the applicant regards as the invention.

As noted above, it is not understood how to use the moistening medium as a carrier liquid when the supply line is not connected to the spray device. This renders the claims confusing. In particular, confusion stems from the use of "moistening atmosphere " followed later by "an atmosphere of at least one of a back-moistening and a moistening medium" in view of claims 2, 4, and the newly added limitation.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1-4, 8, 10, and 11 are rejected under 35 U.S.C. 103(a) as being unpatentable over Sundholm et al. (WO 94/11116) in view of Behmel et al. (US 4,396,651).

Sundholm teaches a process where a spray device, which has an application area, is oriented towards a fibrous web. The spray device atomizes the coating material and applies it to the web. A doctor blade is then used in order to sufficiently smooth the coating onto the web (page 6, line 17). Additionally, it is taught that the doctor blade leads to wasted coating material and that replacement of the doctor blade is time consuming (page 1, lines 25-28). Although Sundholm teaches a method that reduces the amount of wasted coating material and reduces the frequency of doctor blade replacement, it does not teach a method that is sufficiently smooth enough to eliminate both. Thus, there is a desire to achieve smoother coatings in the art of spray coating fibrous webs.

Behmel teaches a process where a spray device, which has an application area, is oriented towards a substrate in a spray room. The spray device atomizes, by air, the coating material in a main nozzle and atomizes an additive in an ancillary nozzle (abstract, column 2, line 64). The additive is water (inherently a moistening medium). As the water is in the form of a vapor the booth (column 3, lines 7-15), this line reads on being a vapor supply line, since it supplies vapor to the coating booth. The water is supplied to a separate nozzle than the coating medium. This reads on the vapor supply line not being connected to the spray device. In view of the spray device being the device that causes the spray (the tip of the nozzle), a moistening atmosphere is directed

Art Unit: 1762

to the back of the spray device, particularly in view of the teaching that the atmosphere is maintained by measuring the humidity around the nozzle and adjusting the water flow rate (column 3, lines 8-15). The spray device taught allows for a high degree of wetting of the substrate, which provides for a smooth coating (column 3, lines 18-40; column 2, lines 1-29).

It would have been obvious at the time the invention was made to a person having ordinary skill in the art to use the method taught by Behmel in order to coat the fibrous web of Sundolm. By doing so, the smoothness of the fibrous web would be increased.

As to claims 2-4, according to Behmel, water, which is a liquid, is flowed into the ancillary nozzle. Since humidity is being measured and controlled in the atmosphere, it is inferred that the water is being transformed into water vapor as it is passed through the nozzle (column 3, lines 6-15).

As to claims 8 and 10, the spray device can be an electrostatic rotary atomizing device (column 2, line 45 and 61-66).

As to claim 11, as taught above, both the water and the coating medium are atomized prior to mixing. This reads on supplying the moistening medium to the atomized coating medium.

Response to Arguments

Applicant argues that the amendment acts to over come the rejections in view of Rosenberger. Examiner agrees and has withdrawn those rejections accordingly.

Applicant argues that the amendment acts to overcome the rejections in view of Sundholm. This is not found persuasive. Applicant has added by amendment that the supply line is not connected to the spray device. Since Sundholm teaches separate nozzles for the coating material and water, this reads on the vapor supply line not being connected to the spray nozzle of the coating material.

Applicant argues that Sundholm fails to teach "directing a vapor toward the back of said spray device". This argument is moot, as the claims do not read to feed "a vapor" toward the back of the spray device. Regardless, the reference does teach directing a moistening atmosphere towards the non-spraying side of a spray device (tip of the nozzle).

Conclusion

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of

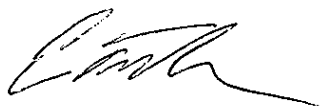
Art Unit: 1762

the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Eric B Fuller whose telephone number is (571) 272-1420. The examiner can normally be reached on Mondays through Thursdays.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Shrive P Beck, can be reached at (703) 308-2333. The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9306.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-0661.



EBF



SHRIVE P. BECK
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 1700